

Configuring Repositories



Marcel de Vries

CTO

@marcelv <https://Fluentbytes.com>



Outline



Managing Git Permissions

Design authentication strategies

Git maintenance

Summary



Managing Git Permissions



Git Permissions



When repository is cloned to your machine, you can access everything

Permissions are set at the server level

- E.g. Branch permissions



Design Authentication Strategies



Various Options to Authenticate



Integrating with Azure Active Directory

Using GitHub SAML integration

Using PAT tokens

Authorize access to REST APIs with OAuth 2.0

Git Maintenance



Maintenance & Recovery



Every clone contains the full repository

- git clone downloads the entire history of the project, including every version of every file

Occasionally, Git automatically runs a command called “auto gc”

- Removes loose objects
- Almost never needed



Purging a File or Directory



More than a new commit!

- Data is always still in the history

It requires a rewrite of history

- Commit's hash is changed, along with the hash of all subsequent commits.

Use `git-filter-branch`

- E.g. remove known large file

```
git filter-branch --index-filter "git rm --cached --ignore-unmatch 'path/file.xyz'"
```



Demo



Remove a Large File from the Repo



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